

NVENT NUHEAT CABLE & MEMBRANE



THE COMFORT YOU DESERVE



nVent NUHEAT Cable is an easy-to-install electric floor heating system that combines installation versatility with advanced new technology.

Offering the ultimate in installation flexibility, Cable is perfect where on-site adjustments are required. Coupled with newly redesigned cable guides and a low-profile cold lead, adding heated floors to your renovation or new construction project has never been easier.

Visit **nVent.com/NUHEAT** to find a distributor near you.

CABLE INSTALLATION







A professional tile setter installs the nVent NUHEAT Cable onto the subfloor. A certified electrician connects the system to your household wiring.

CABLE FAST FACTS

- Heats tile, stone, laminate, engineered wood, or luxury vinyl floors
- · Zero EMF (electromagnetic field) cable design
- Over 30 kit sizes; largest 120 V covers 120 ft² and largest 240 V covers 240 ft²
- Available in 120 V and 240 V
- Spacing options for 12 or 15 W/ft²
- · Thin cold lead and connection joint
- Completely redesigned, easy-to-use cable guides
- Heats shower floors, shower benches & steam rooms
- Halfway marker on heating cable for easy layout planning
- · Industry leading 25-Year Total Care warranty
- The Cable can be installed directly into the Membrane in areas where an uncoupling feature is desired

FAOs

Q: CAN CABLE REPLACE MY ELECTRIC BASEBOARD HEATERS?

A: Yes, Cable produces 12 W/ft² for a heat output of 41 BTUs /ft² (or 15 W/ft² for a heat output of 51 BTUs)—easily heating most rooms.

Q: CAN I USE CABLE TO REPLACE MY HOT-WATER RADIATOR?

A: Yes, Cable is a viable alternative to water radiators. Invisible and maintenance-free, Cable is a perfect heating option for renovations or additions.

Q: WILL CABLE HEAT THE WHOLE ROOM OR JUST THE FLOOR?

A: The whole room! Cable transforms the entire floor area into the room's heat source—guaranteeing even, consistent heat.

HEAT COVERAGE COMPARISON

41-51

BTUs per ft²



BASEBOARD HEATER

34BTUs per ft²



OPERATING COST EXAMPLE

ft²	U	\$ *	
50	5.5 hrs	17¢	
150	7.5 hrs	70¢	
200	7.5 hrs	94¢	
		150 7.5 hrs	150 7.5 hrs 70¢

^{*}Average winter operating cost. Based on US Energy Information Administratior 2016 national average of \$0.12/kWh and modern insulation standards.



nVent NUHEAT Membrane is a tile underlayment that can be installed over the entire subfloor for uncoupling, crack isolation, waterproofing, and floor heating purposes. It can eliminate the need for a second layer of plywood or concrete backer board in most tile installations.

Membrane pillars have been designed to embed nVent NUHEAT Cable for an easy installation method and to guarantee even heat distribution.

Visit nVent.com/NUHEAT to find a distributor near you.

MEMBRANE INSTALLATION









A professional tile setter installs the nVent NUHEAT Cable onto the subfloor. A certified electrician connects the system to your household wiring.

MEMBRANE FAST FACTS

- Provides crack isolation and waterproofing
- Replaces plywood and cement board as tile underlayment
- Accepts use of modified and unmodified thinsets for tile setting
- Industry leading 25-Year Total Care Warranty

ROBINSON FLOOR TEST RATING

The nVent NUHEAT Membrane product receives an 'Extra Heavy' rating in the Robinson Floor Test (ASTM C627):

REPORT NUMBER	SUBSTRATE	TILE	JOIST SPACING	RATING
TNCA-773-14	OSB/Plywood	12" x 12" Porcelain Tile	19.2" O.C	Extra Heavy
TCNA-772-14	Concrete	12" x 12" Porcelain Tile	N/A	Extra Heavy

UNCOUPLING FAQS

Q: WHAT IS THE PURPOSE OF AN UNCOUPLING MEMBRANE?

A: An uncoupling membrane is installed in between the subfloor below and the tile layer above. It prevents stresses in the subfloor from transmitting to the tile and grout layer and potentially causing them to crack.

Q: DO I NEED TO USE AN UNCOUPLING MEMBRANE FOR ALL TILE INSTALLATIONS?

A: No – depending on the condition and construction of the subfloor, an uncoupling membrane may not be needed. Uncoupling membranes are only needed if movement or cracking of the substrate is expected. Discuss with your tile professional to determine if your installation would benefit from using an uncoupling membrane.

WARRANTY





GAIN THE EXCLUSIVE RIGHTS to offer 25-Year Total Care Warranty* for your floor heating installations. By signing up today you're on your way to distinguishing yourself through expert certification.

For more information, please call: +1.800.778.WARM(9276) or email: CertifiedPROteam@nyent.com

^{*}Total Care Warranty is an upgrade of our product warranty and is offered exclusively at no additional cost for all installations completed by nVent NUHEAT Certified PRO installers. To learn more on how to become a nVent NUHEAT Certified PRO installer visit nVent.com/NUHEAT

STEP 1 - Select the membrane product to cover the floor area

Catalog Number	Description	Dimensions
NUMEM161	nVent NUHEAT Membrane - Large Roll (161 ft²)	3'3" x 49.5 ft
NUMEM054	nVent NUHEAT Membrane - Small Roll (54 ft²)	3'3" x 16.5 ft
NUMEM250	nVent NUHEAT Membrane Sheet (10.6 ft²) - Box of 25 sheets	3'3" x 3'3"
PRBPE1505	Waterproofing Seam Tape	6" x 16 ft
PRBPE1530	Waterproofing Seam Tape	6" x 98 ft

STEP 2 - Select the nVent NUHEAT Cable kit to cover the desired heated floor area

CABLE (120 V)

Square Foot Coverage								
w/ Cabl	w/ Cable Guides		w/ Membrane					
3" Spacing*	3"/2"/3" Spacing**	3 pillars†	2/3/2 pillars ^{†‡}	2 pillars†				
12 W/ft²	15 W/ft ²	10 W/ft ²	12 W/ft ²	15 W/ft²	Model No.	Length (ft)	Amps	Watts
8	6	9	8	6	N1C008	29	0.7	80
12	9	14	12	10	N1C012	47	1.2	138
15	12	17	15	12	N1C015	57	1.4	170
25	20	30	25	21	N1C025	98	2.5	299
30	25	36	31	25	N1C030	120	2.9	343
40	30	45	38	31	N1C040	148	3.7	442
50	40	57	48	39	N1C050	188	4.7	562
60	50	71	60	49	N1C060	234	6.0	719
70	55	81	68	55	N1C070	265	6.8	810
80	65	97	82	66	N1C080	318	7.9	947
85	70	102	86	69	N1C085	334	8.5	1021
95	80	115	97	78	N1C095	377	9.7	1161
110	90	129	109	88	N1C110	423	10.8	1299
120	100	145	122	98	N1C120	474	12.2	1461

NUHEAT Cable offers flexible spacing for varying Watt density, allowing installers flexibility on the job site. Square foot coverages above are estimates based on a square area with unheated border of 2* and actual coverage will vary depending on the number of turns in the cable path (more turns result in slightly less coverage).

CABLE GUIDE NOTES:

- *3-inch spacing in Cable Guides produces 12 W/ft2 (standard output)
- **Alternating 3-inch / 2-inch spacing in Cable Guides produces 15 W/ft² (high output), which is best for installations on a concrete slab or when heat loss is a concern.

MEMBRANE NOTES:

- $^{\circ}3$ pillar spacing in NUHEAT Membrane produces 10 W/ft² (low output), which is not typically recommended but possible for low-use areas when trying to stretch coverage.
- $^\dagger 2$ pillar spacing in NUHEAT Membrane produces 15 W/ft² (high output), which is best for installations on a concrete slab or when heat loss is a concern.

 $^{^{\}ddagger}\text{Alternating }2\text{-}3\text{-}2$ pillar spacing in NUHEAT Membrane produces 12 W/ft² (standard output).

STEP 2 CONTINUED

CABLE (240 V)

Square Foot Coverage								
w/ Cabl	e Guides	w/ Membrane						
3" Spacing*	3"/2"/3" Spacing**	3 pillars†	2/3/2 pillars ^{†‡}	2 pillars†				
12 W/ft²	15 W/ft²	10 W/ft ²	12 W/ft ²	15 W/ft ²	Model No.	Length (ft)	Amps	Watts
15	12	17	14	12	N2C015	56	0.7	165
20	15	24	21	17	N2C020	80	0.9	224
25	20	31	26	21	N2C025	102	1.3	302
35	30	41	35	28	N2C035	136	1.7	403
45	35	54	46	37	N2C045	178	2.2	523
55	45	63	53	43	N2C055	207	2.6	632
65	50	76	64	52	N2C065	250	3.1	742
70	60	84	71	58	N2C070	277	3.5	842
85	70	102	86	69	N2C085	334	4.3	1020
90	75	109	92	74	N2C090	358	4.6	1102
100	85	120	101	82	N2C100	393	5.0	1211
120	100	145	121	98	N2C120	472	5.9	1427
135	110	162	136	110	N2C135	529	6.8	1621
145	120	172	144	116	N2C145	561	7.1	1704
160	130	193	162	131	N2C160	630	8.0	1914
170	140	204	171	138	N2C170	665	8.6	2054
190	160	233	195	157	N2C190	757	9.6	2314
215	180	261	219	176	N2C215	849	10.8	2589
240	200	293	246	198	N2C240	953	12.1	2905

NUHEAT MEMBRANE SPECIFICATIONS

Material	Polypropylene plastic heat-welded to a non-woven polypropylene fabric
Thickness	0.22 in (5.5 mm)
Width	39 in (991 mm)
Weight	0.172 lb/ft² (0.84 kg/m²)
Storage Conditions	Store in a cool and dry place avoiding direct sunlight and heat sources

NUHEAT CABLE SPECIFICATIONS

NOTICAL CABLE SI E	CITICATIONS
Operating voltage	120 V, 208 V, and 240 V
Power output	10-15 W/ft² (depending on wire spacing)
Minimum bending radius	0.5 in (12 mm)
Maximum continuous exposure temperature	194°F (90°C)
Minimum installation temperature	50°F (10°C)
Heating cable	2-wire, grounded, twisted pair with PVC outer jacket
Cold lead	2-wire, 16-18 AWG plus ground braid;

nvent

nVent NUHEAT Signature

WiFi-Enabled



nVent NUHEAT Element

Non-Programmable Floor Heating Thermostat

- · Manual temperature control
- Dual-voltage (120 V & 240 V)



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